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In re Patent Application of :

Confirmation No. 5002

MICHAEL et al.

Atty. Ref.: 117-589

Appln. No. 10/578,559

T.C. / Art Unit: Not Known

Filed: May 8, 2006

Examiner: Not Known

FOR: IMPROVEMENTS RELATING TO SEMEN PRESERVATION

\* \* \* \* \*

**INFORMATION DISCLOSURE STATEMENT**

September 13, 2006

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Sir:

Attached is Form PTO-1449 listing U.S. patent documents and the enclosed non-U.S. patent documents.

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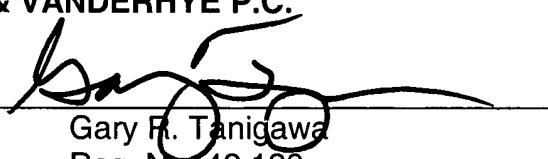
has been conducted or that this statement encompasses all possible material information.

Consideration of the foregoing and enclosures, as well as the return of a copy of the Form PTO-1449 with the Examiner's initials per M.P.E.P. § 609, are earnestly solicited. The Examiner is invited to contact the undersigned if any further information is needed.

Respectfully submitted,

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## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AR	4,772,554	09/1988	Ax et al.			
BR	4,815,835	03/1989	Ortueta Corona			
CR	5,173,404	12/1992	diZerega			
DR	5,635,366	06/1997	Cooke et al.			
ER	2003/0124640	07/2003	Cooke et al.			
FR						
GR						

## FOREIGN PATENT DOCUMENTS

DOCUMENT	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
HR					
IR					
JR					
KR					
LR					
MR					
NR					
OR					
PR					

## OTHER DOCUMENTS (including Author, Title, Date, Pertinent pages, etc.)

QR	Agarwal et al. "NAD-dependent isoform of 11 $\beta$ -hydroxysteroid dehydrogenase" J. Biol. Chem. 269:25959-25962 (1994)
RR	Albiston et al. "Cloning and tissue distribution of the human 11 $\beta$ -hydroxysteroid dehydrogenase type 2 enzyme" Mol. Cell. Endocrinol. 105:R11-R17 (1994)
SR	Andersen "Levels of steroid-binding proteins and steroids in human preovulatory follicle fluid and serum as predictors of success in <i>in vitro</i> fertilization-embryo transfer treatment" J. Clin. Endocrinol. Metabol. 71:1375-1381 (1990)
TR	Ball et al. "Effect of antioxidants on preservation of motility, viability and acrosomal integrity of equine spermatozoa during storage at 5°C" Theriogenol. 56:577-589 (2001)
UR	Bar-Ami et al. "Increasing progesterone secretion and 3 $\beta$ -hydroxysteroid dehydrogenase activity of human cumulus cells and granulosa-lutein cells concurrent with successful fertilization of the corresponding oocyte" J. Steroid Biochem. Mol. Biol. 51:299-305 (1994)
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WR	Bühler et al. "Endogenous inhibitors of 11 $\beta$ -OHSD: Existence and possible significance" Steroids 59:131-135 (1994)
ZR	Cerolini et al. "Changes in sperm quality and lipid composition during cryopreservation of boar semen" Reproduction 121:395-401 (2001)
AAR	Cerolini et al. "Viability, susceptibility of peroxidation and fatty acid composition of boar semen during liquid storage" Animal Reproduction Sci. 58:99-111 (2000)
BBR	Cooke et al. "The direct regulation of gonadal functions by corticosteroids and $\beta$ -hydroxysteroid dehydrogenases" Eur. J. Clin. Invest. 25 (suppl. 2):A49 Abstract No. 281 (1995)

\*Examiner

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<b>INFORMATION DISCLOSURE CITATION</b>		APPLN. NO. 10/578,559	ATTY. DKT. NO. 117-589
(Use several sheets if necessary)		APPLICANT MICHAEL et al.	
		FILING DATE May 8, 2006	GROUP Not Known
<b>OTHER DOCUMENTS (including Author, Title, Date, Pertinent pages, etc.)</b>			
AR	Donoghue et al. "Effects of water and lipid-soluble antioxidants on turkey sperm viability, membrane integrity, and motility during liquid storage" Poultry Sci. 76:1440-1445 (1997)		
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MR	Medrano et al. "Variations in the proportion of glycolytic/non-glycolytic energy substrates modulate sperm membrane integrity and function in diluted boar samples stored at 15-17°C" Reprod. Dom. Anim. 40:448-453 (2005)		
NR	Mercer et al. "Localization of an 11 $\beta$ hydroxysteroid dehydrogenase activity to the distal nephron. Evidence for the existence of two species of dehydrogenase in the rat kidney" Endocrinol. 130:540-543 (1992)		
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PR	Michael et al. "Evidence for the co-existence of two distinct isoforms of 11 $\beta$ hydroxysteroid dehydrogenase (11 $\beta$ HSD) in human granulosa-lutein cells" Endocrinol. 140 (suppl.): Abstract No. OC36 (1994)		
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<b>OTHER DOCUMENTS (including Author, Title, Date, Pertinent pages, etc.)</b>			
AR	Monder et al. "Evidence for kinetically distinct forms of corticosteroid 11 $\beta$ -dehydrogenase in rat liver microsomes" J. Steroid Biochem. 32:77-83 (1989)		
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MR	Radwanska "The role of reproductive hormones in vascular disease and hypertension" Steroids 58:605-610 (1993)		
NR	Rundle et al. "The intrarenal localization of mineralocorticoid receptors and 11 $\beta$ -dehydrogenase: Immunocytochemical studies" Endocrinol. 125:1700-1704 (1989)		
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PR	Sellés et al. "Analysis of <i>in vitro</i> fertilizing capacity to evaluate the freezing procedures of boar semen and to predict the subsequent fertility" Reprod. Dom. Anim. 38:66-72 (2003)		
QR	Siebe et al. "Metabolism of dexamethasone: Sites and activity in mammalian tissues" Renal Physiol. Biochem. 16:79-88 (1993)		
RR	Song et al. "Inhibition of 11 $\beta$ -hydroxysteroid dehydrogenase by gossypol and bioflavonoids" J. Lab. Clin. Med. 120:792-797 (1992)		
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TR	Strzezek et al. "Effects of dietary supplementation with polyunsaturated fatty acids and antioxidants on biochemical characteristics of boar semen" Reproductive Biol. 4:271-287 (2004)		
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AR	Thaventhiran et al. "Effects of progestins, androgens and oestrogens on human ovarian 11 $\beta$ -hydroxysteroid dehydrogenase (11BHSD) Activity" Lancet 342:711-712 (1993)
BR	Twigg et al. "Latrogenic DNA damage in human spermatozoa during preparation: Protective significance of seminal plasma" Mol. Human Reproduct. 4:439-445 (1998)
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DR	Walker et al. "Tissue-specific distribution of the NAD <sup>+</sup> -dependent isoform of 11 $\beta$ -hydroxysteroid dehydrogenase" Endocrinol. 131:970-972 (1992)
ER	Watson "The roles of lipid and protein in the protection of ram spermatozoa at 5°C by egg-yolk lipoprotein" J. Reprod. Fert. 62:483-492 (1981)
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Form PTO-FB-A820 (Also PTO-1449)